

MATERIAL SAFETY DATA SHEET

DATE PRINTED: 3/21/2002

PAGE
MSDS NO. 1000.2¹

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

MANUFACTURERS NAME
W.M. BARR & COMPANY, INC.ADDRESS
2105 Channel Ave.
Memphis, TN 38113 USAEMERGENCY TELEPHONE #1
901-775-0100EMERGENCY CONTACT
W.M. Barr Technical ServicesEMERGENCY INFORMATION
See Section 5 for additional Emergency InformationINVENTORY ITEM #
CHEMICAL FORMULA
1000.2PRODUCT NAME
JAPAN DRIERREVISED BY
W.M. Barr Technical ServicesREVISION DATE
04/20/1994

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

CARCINOGENICITY

SUBSTANCE DESCRIPTION	PERCENT	CAS#	NTP	ACGIH	OSHA	IARC
MINERAL SPIRITS	80- 85	N/A	N	N	N	N
** ABOVE INGREDIENT CONSISTS OF THE FOLLOWING **						
STODDARD SOLVENT, TYPE I	95-100	8052-41-3	N	N	N	N
1,2,4-TRIMETHYLBENZENE	0- 2	95-63-6	N	N	N	N
ZIRCONIUM SOLUTION	5- 10	22464-99-9	N	N	N	N
** ABOVE INGREDIENT CONSISTS OF THE FOLLOWING **						
ZIRCONIUM 2-ETHYLHEXANOATE	50- 55	22464-99-9	N	N	N	N
ISOPARAFFINS	40- 45	64742-48-9	N	N	N	N
2-ETHYLHEXANOIC ACID	1- 5	149-57-5	N	N	N	N
COBALT ALKANOTE SOLUTION	5- 10	N/A	N	N	N	N
** ABOVE INGREDIENT CONSISTS OF THE FOLLOWING **						
STODDARD SOLVENT	50- 55	8052-41-3	N	N	N	N
COBALT 2-ETHYLHEXANOATE	20- 25	136-52-7	N	N	N	N
COBALT NAPHTHENATE	20- 25	61789-51-3	N	N	N	N
2-ETHYLHEXANOIC ACID	1- 5	149-57-5	N	N	N	N
MANGANESE SOLUTION	5- 10	N/A	N	N	N	N
** ABOVE INGREDIENT CONSISTS OF THE FOLLOWING **						
MANGANESE 2-ETHYLHEXANOATE	30- 35	15956-58-8	N	N	N	N
LIGHT AROMATIC NAPHTHA	35- 40	64742-95-6	N	N	N	N
1,2,4-TRIMETHYLBENZENE	10- 15	95-63-6	N	N	N	N
MANGANESE NAPHTHENATE	5- 10	1336-93-2	N	N	N	N

SECTION 3. REGULATORY INFORMATION

EXPOSURE LIMITS/REGULATORY INFORMATION

SUBSTANCE DESCRIPTION	REG. AGCY	U/M	TWA	STEL	CEIL	SKIN	PEL
MINERAL SPIRITS	ACGIH OSHA	PPM PPM	N/E N/E	N/E N/E	N/E N/E	N N	N/E N/E
EXXON RECOMMENDS AN OCCUPATIONAL EXPOSURE LIMIT OF 100 PPM TOTAL HYDROCARBON BASED ON COMPOSITION.							
STODDARD SOLVENT, TYPE I	ACGIH OSHA	PPM PPM	100.00 100.00	N/E N/E	N/E N/E	N N	N/E 500.00
1,2,4-TRIMETHYLBENZENE	ACGIH OSHA	PPM PPM	N/E N/E	N/E N/E	N/E N/E	N N	N/E N/E

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ZIRCONIUM SOLUTION	ACGIH OSHA	MG/M3 MG/M3	N/E N/E	N/E N/E	N/E N/E	N N	N/E N/E
ZIRCONIUM 2-ETHYLHEXONATE EXPOSURE LIMIT AS ZIRCONIUM.							
ZIRCONIUM 2-ETHYLHEXONATE	ACGIH OSHA	MG/M3 MG/M3	5.00 N/E	N/E N/E	N/E N/E	N N	N/E 5.00
ACGIH TWA AND OSHA PEL AS ZIRCONIUM AS PROVIDED BY SUPPLIER.							
ISOPARAFFINS	ACGIH OSHA	PPM PPM	N/E N/E	N/E N/E	N/E N/E	N N	N/E N/E
2-ETHYLHEXANOIC ACID	ACGIH OSHA	PPM PPM	N/E N/E	N/E N/E	N/E N/E	N N	N/E N/E
COBALT ALKANOTE SOLUTION	ACGIH OSHA	PPM PPM	N/E N/E	N/E N/E	N/E N/E	N N	N/E N/E
STODDARD SOLVENT	ACGIH OSHA	PPM PPM	100.00 100.00	N/E N/E	N/E N/E	N N	N/E 500.00
COBALT 2-ETHYLHEXANOATE	ACGIH OSHA	PPM PPM	N/E N/E	N/E N/E	N/E N/E	N N	N/E N/E
COBALT NAPHTHENATE	ACGIH OSHA	PPM PPM	N/E N/E	N/E N/E	N/E N/E	N N	N/E N/E
MANGANESE SOLUTION	ACGIH OSHA	MG/M3 MG/M3	5.00 N/E	N/E N/E	N/E N/E	N N	N/E N/E
MANGANESE 2-ETHYLHEXANOATE	ACGIH OSHA	MG/M3 MG/M3	5.00 N/E	N/E N/E	N/E 5.00	N N	N/E 5.00
EXPOSURE LIMITS AS MANGANESE, AS PROVIDED BY SUPPLIER.							
LIGHT AROMATIC NAPHTHA	ACGIH OSHA	PPM PPM	N/E N/E	N/E N/E	N/E N/E	N N	N/E N/E
THE SUPPLIER RECOMMENDS AN EXPOSURE LIMIT OF 50 PPM, TWA.							
MANGANESE NAPHTHENATE	ACGIH OSHA	MG/M3 MG/M3	5.00 N/E	N/E N/E	N/E 5.00	N N	N/E 5.00
EXPOSURE LIMITS AS MANGANESE, AS PROVIDED BY SUPPLIER.							

ADDITIONAL REGULATORY INFO

The time weighted average (TWA) value described herein is a threshold limit value (TLV) as established by ACGIH. The permissible exposure limit (PEL) is a value established by OSHA.

CALIFORNIA (PROPOSITION #65)

Ingredients in this product are not listed on California's Prop 65 list: "Chemicals Known to the State to Cause Cancer or Reproductive Toxicity."

SEC. 313 SUPPLIER NOTIFICATION

The following information must be included in all MSDS that are copied and distributed for this material.

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40CFR 372):

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SECTION 3. REGULATORY INFORMATION
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SUBSTANCE DESCRIPTION	PERCENT BY WEIGHT (UPPER LIMIT)	CAS#
1,2,4-TRIMETHYLBENZENE	3	95-63-6
COBALT 2-ETHYLHEXANOATE	3	136-52-7
COBALT NAPHTHENATE	3	61789-51-3
MANGANESE 2-ETHYLHEXANOATE	4	15956-58-8
XYLENE	1	1330-20-7

CLEAN AIR ACT

This formula contains no known ozone depleting chemicals.

HAZARD COMMUNICATION STANDARD

This document is prepared in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200). This MSDS contains thirteen (13) sections.

The following effects and/or symptoms are not expected to be experienced by persons who use this product properly and according to ALL instructions, precautions, and warnings; however, should the product user experience ANY questionable effects or symptoms, the product user should immediately seek medical attention.

SECTION 4. HAZARDS IDENTIFICATION
-----**INHALATION ACUTE EXPOSURE EFFECTS**

May cause dizziness; headache; irritation of respiratory tract; loss of coordination; drowsiness; fatigue; narcosis; weakness; difficulty breathing; blurred vision; tightness and pain in chest; coughing; nausea; pneumoconiosis; muscle twitches; eye irritation; vomiting; light headedness; and depression and damage to central nervous system. Severe overexposure may cause convulsions, unconsciousness, and death.

SKIN CONTACT ACUTE EXPOSURE EFFECTS

May cause irritation, redness, burning, drying, and cracking of the skin.

EYE CONTACT ACUTE EXPOSURE EFFECTS

May cause redness, stinging, tearing, and irritation.

INGESTION ACUTE EXPOSURE EFFECTS

Harmful or fatal if swallowed. May cause headache; dizziness; nausea; vomiting; drowsiness; fatigue; loss of coordination; depression; gastrointestinal irritation; weakness; muscle twitches; diarrhea; depression of the central nervous system; convulsions; unconsciousness; and death. Liquid aspirated into lungs can cause damage or chemical pneumonitis, which can be fatal.

CHRONIC EXPOSURE EFFECTS

Reports have associated repeated and prolonged overexposure to solvents with neurological and other physiological damage. May cause skin irritation; drying, burning, redness, and cracking of skin; anemia; bone marrow damage; liver damage; and jaundice.

MEDICAL CONDITIONS AGGRAVATED

Diseases of the skin, liver, kidneys, central nervous system, cardiovascular system, and respiratory system; psychiatric disorders; and alcoholism.

PRIMARY ROUTE OF EXPOSURE

Inhalation, ingestion, and dermal.

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SECTION 5. FIRST AID MEASURES
-----**INHALATION**

If user experiences breathing difficulty, move to air free of vapors. Administer oxygen or artificial respiration until medical assistance can be rendered.

SKIN CONTACT

Wash with soap and water.

EYE CONTACT

Flush with large quantities of water for at least 15 minutes. If irritation from contact persists, get medical attention.

INGESTION

DO NOT induce vomiting. Call your poison control center, hospital emergency room, or physician immediately.

NOTE TO PHYSICIAN

This formula is registered with POISINDEX.
Call your local poison control center for further information.

SECTION 6. FIRE FIGHTING MEASURES

HAZARD RATING SOURCE	HMIS	NFPA
HEALTH	2	1
FLAMMABILITY	2	2
REACTIVITY	0	0
OTHER	G	NA

FLASH METHOD

Seta

FLASH POINT

114.00 °F 45.55 °C

LOWER EXPLOSION LIMIT

0.8

GENERAL COMMENTS

OSHA FLAMMABILITY: Class II

EXTINGUISHING METHOD

Use carbon dioxide, dry powder, or foam.

FIRE FIGHTING PROCEDURES

Self-contained respiratory protection should be provided for fire fighters fighting fires in buildings or confined areas. Storage containers exposed to fire should be kept cool with water spray to prevent pressure build-up. Stay away from heads of containers that have been exposed to intense heat or flame.

FIRE AND EXPLOSION HAZARDS

CAUTION! COMBUSTIBLE. KEEP AWAY FROM HEAT, SPARKS, FLAME AND ALL OTHER SOURCES OF IGNITION.

SECTION 7. ACCIDENTAL RELEASE MEASURES
-----**CLEAN-UP**

Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind, out of low areas, and ventilate closed spaces before entering. Shut off ignition sources; keep flares, smoking or flames out of hazard area. SMALL SPILLS: take up liquid with sand, earth or other noncombustible absorbent material and place in a plastic

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SECTION 7. ACCIDENTAL RELEASE MEASURES
(CONTINUED)

container where applicable. LARGE SPILLS: dike far ahead of spill for later disposal.

For transportation related spills contact Chemtrec at 1-800-424-9300 for emergency assistance.

WASTE DISPOSAL

Dispose in accordance with applicable local, state and federal regulations.

SECTION 8. HANDLING AND STORAGE
-----**STORAGE**

Keep container tightly closed when not in use. Store in a cool, dry place. Do not store near flames or at elevated temperatures.

HANDLING

Read carefully all cautions and directions on product label before use. Since empty container retains residue, follow all label warnings even after container is empty. Dispose of empty container according to all regulations. Do not reuse this container.

SECTION 9. TRANSPORT INFORMATION
-----**TRANSPORTATION**

For D.O.T. information, contact W.M. Barr Technical Services Department.

SECTION 10. EXPOSURE CONTROLS/PERSONAL PROTECTION
-----**VENTILATION PROTECTION**

Use only with adequate ventilation to prevent build-up of vapors. Open all windows and doors. Use only with a cross ventilation of moving fresh air across the work area. If strong odor is noticed or you experience slight dizziness, headache, nausea, or eye-watering - STOP - ventilation is inadequate. Leave area immediately.

RESPIRATORY PROTECTION

For OSHA controlled work place and other regular users - Use only with adequate ventilation under engineered air control systems designed to prevent exceeding appropriate TLV. For occasional use, where engineered air control is not feasible, use properly maintained and properly fitted NIOSH approved respirator for organic solvent vapors. A dust mask does not provide protection against vapors.

SKIN PROTECTION

Wear impermeable gloves. Gloves contaminated with product should be discarded. Promptly remove clothing that becomes soiled with product.

EYE PROTECTION

Safety glasses, chemical goggles or face shields are recommended to safeguard against potential eye contact, irritation, or injury. Contact lenses should not be worn while working with chemicals.

OTHER PROTECTION

Various application methods can dictate use of additional protective safety equipment, such as impermeable aprons, etc., to minimize exposure. A source of clean water should be available in the work area for flushing eyes and skin. Do not eat, drink, or smoke in the work area. Wash hands thoroughly after use. Before reuse, thoroughly clean any clothing or protective equipment that has been contaminated by prior use. Discard any clothing or other protective equipment that cannot be decontaminated, such as gloves or shoes.

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SECTION 11. PHYSICAL AND CHEMICAL PROPERTIES

VOLATILE %
91.21
by weight

BOILING POINT
GT 300.00 F 148.88 C BOILING RANGE: 300 F - 360 F

VAPOR DENSITY (Air = 1.0)
Heavier than air

EVAPORATION RATE
Slower than ether

BULK DENSITY
6.679
lbs/gal at 75 F

pH FACTOR
N/E

PHOTOCHEMICALLY REACTIVE
NO

MAX V.O.C.
730 grams per liter

MAX VAPOR PRESSURE
(of the V.O.C.) 2mm Hg at 20 degrees C

SECTION 12. STABILITY AND REACTIVITY

INCOMPATIBILITIES
Incompatible with strong oxidizing agents; reducing agents;
halogens; and sulfur.

DECOMPOSITION
Thermal decomposition may produce carbon monoxide, carbon dioxide,
and toxic fumes.

POLYMERIZATION
Will not occur.

STABILITY
Stable.

SECTION 13. ADDITIONAL INFORMATION

IMPORTANT NOTE
The information contained herein is presented in good faith and
believed to be accurate as of the effective date shown above. This
information is furnished without warranty of any kind. Employers
should use this information only as a supplement to other
information gathered by them and must make independent determination
of suitability and completeness of information from all sources to
assure proper use of these materials and the safety and health of
employees. Any use of this data and information must be determined
by the user to be in accordance with applicable federal, state and
local laws and regulations.

LEGEND:
PPM = parts per million
MG/M3 = milligrams per cubic meter
N/E or NE = none established
GT = greater than

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SECTION 13. ADDITIONAL INFORMATION
(CONTINUED)

N/A or NA = not applicable
TCC = tag closed cup
TOC = tag open cup
PMCC = Pensky-Martens closed cup
IDLH = Immediately Dangerous to Life and Health

END OF MSDS